

**REMARKS**

Claims 15, 17, 21-27, 29-31, and 37-41 are currently pending in this application. Applicants respectfully request that these claims be reconsidered in light of the amendments and remarks presented herein and that they be allowed.

35 U.S.C. § 112, second paragraph

On page 2 of the Office Action, the Office maintained the rejection of all of the claims under 35 U.S.C. § 112, second paragraph, because it asserted that it is not clear what the “N-terminal region of a polypeptide” is. Claims 15, 17, 29, and 41 have been amended to recite that the “nucleotide sequence coding for the N-terminal region of a polypeptide . . . consists of the sequence of an about 3 Kb *HindIII-PstI* DNA fragment of the  $\delta$  endotoxin gene of *Bacillus thuringiensis*.” Thus, an “N-terminal region of a polypeptide” is encoded by a portion of a gene that is described in the specification on page 2, lines 27-29, and page 3, lines 18-19. This language renders the claims definite. Accordingly, Applicants request that the rejection be withdrawn for these claims.

In addition, claim 21 has been amended to delete the term “N-terminal region of a polypeptide.” Claim 21 is clear without this term because the steps recited to obtain a nucleotide sequence coding for a polypeptide in the invention are defined by the conditions and probes recited, specifically, hybridizing at 42°C in a solution containing 5xSSC, 30% formamide, and 1X Denhardt's, with probes encoding amino acids 1-280 and 621-1175 of SEQ ID NO: 2. Thus, Applicants respectfully request that the rejection of claim 21 also be withdrawn.

Also on page 2 of the Office Action, the Office asserted that claims 29 and 41 are not limited because hybridization parameters had not been recited and it rejected these claims under 35 U.S.C. § 112, second paragraph. As amended, claims 29 and 41 recite

hybridization parameters. This amendment is supported on page 23, lines 24-30, of the specification. Applicants respectfully request that this rejection be withdrawn.

On page 3, the Office asserted that restriction fragments recited in claims 15-18, 21, 25-27, 29, and 41 render the claims indefinite because a description of the nucleic acid is lacking. As amended, claims 15, 17, 29, and 41 recite that the DNA fragments are from the  $\delta$  endotoxin gene of *Bacillus thuringiensis*. Thus, a complete description of the nucleic acid from which these fragments are derived is provided in the claims and the claims are definite. Accordingly, Applicants respectfully request that the rejection of these claims be withdrawn.

Furthermore, Applicants have deleted the term "*HindIII-PstI* DNA fragment" from claim 21. Instead, claim 21 is definite because it recites probes from SEQ ID NO: 2 and hybridization conditions. Applicants respectfully request that the rejection of this claim also be withdrawn.

On page 3, the Office asserted that claim 21 is indefinite because it refers to amino acid residues without providing a reference SEQ ID number. As amended, claim 21 refers to SEQ ID NO: 2. Applicants request that the rejection be withdrawn.

Also on page 3, the Office asserted that the previous amendments to the claims did not overcome the rejections because of the "comprising" language and the lack of recitation of strains of *Bacillus thuringiensis*. Applicants note that independent claims 15, 17, 29, and 41, as amended, use "consisting of" language when referring to the "sequence of an about 3 kb *HindIII-PstI* DNA fragment of the  $\delta$  endotoxin gene of *Bacillus thuringiensis*" and that the *aizawai* 7-29 strain is recited. Thus, Applicants request that the rejection of these claims be withdrawn.

35 U.S.C. § 112, first paragraph

On page 3 of the Office Action, the Office rejected claims 15-18, 21-27, 29-31, and 37-41 for lack of written description support because it asserted that no structure was provided for the claimed nucleic acid or encoded polypeptide. The Office further asserted that the previous amendments rendered the claims indefinite because there was no correlation between structure and function. Independent claims 15, 17, 29, and 41 now recite that the claimed nucleic acids "consist of the sequence of an about 3 kb *HindIII-PstI* DNA fragment of the  $\delta$  endotoxin gene of *Bacillus thuringiensis*." Because this structure is described in the specification, for example on page 2, lines 27-29, and page 3, lines 18-19, there is written description support for the claimed nucleic acid.

Independent claim 21 also has written description support for the recited amino acids of SEQ ID NO: 2, which the probes used in the claimed process encode, on page 16, lines 9-10. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. § 112, first paragraph, be withdrawn.

35 U.S.C. § 102

The Office rejected claims 15, 17, 29, and 41 under 35 U.S.C. § 102(e) as being anticipated by Witt et al., U.S. Patent No. 5,110,905, because it allegedly teaches plasmids comprising the  $\delta$  endotoxin gene of *B. thuringiensis*. The Office noted that claims, which recite the aizawai 7-29 strain of *B. thuringiensis* were not included in this rejection. Indeed, Witt et al. does not recite the aizawai 7-29 strain of *B. thuringiensis*. As amended, though, claims 15, 17, 29, and 41 recite this strain. Because Witt et al. does not teach the strain of *B. thuringiensis* recited in the claims, the claims are not anticipated.

Furthermore, DeWitt et al. does not teach a polypeptide with the sequence of SEQ ID NO: 2, but the alternative embodiments recited in claims 29 (ii) and (iii) and 41 (ii) and (iii) include sequences from SEQ ID NO: 2. Because Witt et al. does not teach each and every element of the rejected claims, Applicants respectfully request that the rejection under 35 U.S.C. § 102(e) be withdrawn.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 15, 17, 21-27, 29-31, and 37-41 in condition for allowance. Applicants submit that the proposed amendments of claims 15, 17, 21, 29, and 41 do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

Finally, Applicants submit that the entry of the Amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims. Applicants therefore request the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

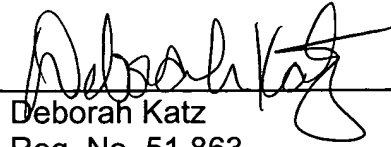
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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